

REMARKS

Claims in the case are 1 and 3. Claims 1 and 3 have been amended, no claims have been added, and no claims have been cancelled herein. Claims 2 and 4-6 were previously cancelled without prejudice in an Amendment dated 29 April 2005. The amendments to Claim 1 and 3 will be discussed in further detail herein.

Claims 1 and 3 stand objected to. This objection is respectfully traversed with regard to the amendments herein and the following remarks.

Claims 1 and 3 have each been amended herein to replace, "polymerizing **3,4-dialkoxythiophene** represented by formula (1)" with --polymerizing a **monomer** represented by formula (1)-- (emphasis added).

In light of the amendments herein and the preceding remarks, the present objection to the claims is deemed to have been overcome. Reconsideration and withdrawal of the present objection to the claims is respectfully requested.

Claim 1 stands rejected under 35 U.S.C. § 112, second paragraph. This rejection is respectfully traversed in light of the amendments herein and the following remarks.

The preamble of Claim 1 has been amended herein to recite the complex as including "(i) a material selected from the group consisting of poly(3,4-alkylenedioxythiophene), poly(3,4-dialkoxythiophene) and combinations thereof." In addition, Claim 1 has been further amended herein to replace, "polymerizing **3,4-dialkoxythiophene** represented by formula (1)" with --polymerizing a **monomer** represented by formula (1)-- (emphasis added).

In light of the amendments herein and the preceding remarks, Applicants' claims are deemed to particularly point out and distinctly claim the subject matter which they regard as their invention. Reconsideration and withdrawal of the present rejection is respectfully requested.

Claims 1 and 3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 5,300,575 (**Jonas et al**) in view of United States Patent No. 4,728,399 (**Moehwald**). This rejection is respectfully traversed in light of the following remarks.

Jonas et al disclose first forming a polythiophene polymer in a dispersion, and then applying the dispersion to a substrate. Jonas et al do not disclose, teach or suggest forming a polythiophene polymer *in situ* by polymerizing 3,4-ethylenedioxythiophene monomers on the surface of the substrate. Jonas et al disclose applying their polythiophene dispersions to substrates including, molded organic plastics, glass and ceramics (column 5, lines 14-23). Jonas et al do not disclose, teach or suggest applying their polythiophene dispersions to metal substrates.

Moehwald discloses forming a conductive polymer *in situ* by polymerizing monomers on the surface of a metal substrate. Moehwald does not disclose, teach or suggest first forming a conductive polymer (e.g., in an aqueous solution), and then applying the preformed conductive polymer to a substrate. In fact, Moehwald teaches away from first forming a conductive polymer, and then applying the preformed conductive polymer to a substrate. Moehwald disclose that their process provides for: improved adhesion to the metal substrate; and dispensing with the need to pre-treat the surface of the metal substrate. See column 1, lines 39-45, and column 1, lines 58-61 of Moehwald.

Moehwald discloses forming conductive polymers *in situ* by polymerizing monomers such as 2- or 3-alkylthiophenes, such as 2,3-diethylthiophene. However, Moehwald provides no disclosure, teaching or suggestion with regard to polymerizing 3,4-ethylenedioxythiophene monomers. See column 2, lines 11-32 of Moehwald.

Jonas et al disclose first forming a polythiophene polymer in a dispersion, and then applying the dispersion to a substrate. Jonas et al do not disclose, teach or suggest forming a polythiophene polymer *in situ* by polymerizing 3,4-ethylenedioxythiophene monomers on the surface of the substrate. Moehwald discloses forming a conductive polymer *in situ* by polymerizing monomers on the surface of a metal substrate. Moehwald does not disclose, teach or suggest, and in fact teaches away from, first forming a conductive polymer (e.g., in an aqueous solution), and then applying the preformed conductive polymer to a substrate.

In light of the preceding remarks, neither Jonas et al nor Moehwald provide the requisite disclosure that would motivate a skilled artisan to combine or otherwise modify their respective disclosures to arrive at Applicants' claimed method. As the

Court of Appeals for the Federal Circuit has stated, there are three possible sources for motivation to combine references in a manner that would render claims obvious. These are: (1) the nature of the problem to be solved; (2) the teaching of the prior art; and (3) the knowledge of persons of ordinary skill in the art. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1458 (Fed. Cir. 1998). The nature of the problem to be solved and the knowledge of persons of ordinary skill in the art are not present here and have not been relied upon in the rejection. As for the teaching of the prior art, the above discussion has established that neither of the patents relied upon in the rejection provide the requisite teaching, and certainly do not provide the motivation or suggestion to combine that is required by Court decisions.

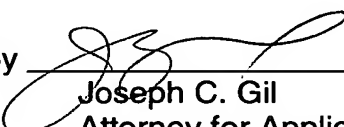
Jonas et al and Moehwald, either alone or in combination, do not provide the requisite disclosure that would motivate a skilled artisan to select peroxodisulfuric acid over other oxidizing agents. Moehwald at column 3, lines 3-12 disclose a number of oxidizing agents, including “peroxodisulfuric acid and its alkali metal and ammonium salts,” but provide no further disclosure or suggestion as to selecting peroxodisulfuric acid over the other recited oxidizing agents. In the examples of Moehwald, the oxidizing agent used is sodium persulfate (column 4, lines 39-60). Jonas et al disclose the use of “alkali or ammonium persulfates” (column 3, lines 55-56).

It is respectfully submitted that the rejection impermissibly uses Applicants' application as a blueprint for selecting and combining or modifying the cited references to arrive at Applicants' claimed invention, thereby making use of prohibited hindsight in the selection and application of the cited references. The use of hindsight reconstruction of an invention is an illogical and inappropriate process by which to determine patentability. *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1457 (Fed. Cir. 1998). Modifying “prior art references without evidence of such a suggestion, teaching or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability -- the essence of hindsight.” *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999).

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Jonas et al in view of Moehwald. Reconsideration and withdrawal of the present rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to meet all the requirements of 35 U.S.C. §112, and to define an invention that is unanticipated, unobvious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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